Appeal Documents

PretiFlaherty

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November 26, 2010

VIA ELECTRONIC AND FIRST CLASS MAIL

Susan Lessard, Chair
Board of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

Re: **Notice of Appeal and Request for Public Hearing – Departmental Findings of Fact and Order on Air Emission License A-1041-71-A-N (SM).**

Dear Chair Lessard:

By this letter, Jeanette and Doug Seivwright, Robert and Donna Duffy, Tom and Carol Planche, and Joyce and Raymond Provencher (collectively "Berwick Residents") hereby appeal the Department of Environmental Protection's ("DEP") Findings of Fact and License on Air Emission License A-1041-71-A-N (SM) ("License") issued October 27, 2010 for Berwick Metal & Iron Recycling, Inc. ("BI&MR"). This License provides BI&MR with a Chapter 115 New Minor Source air license permitting the operation of emissions sources associated with BI&MR's unauthorized construction and otherwise completely unlicensed automobile shredding operation. The License is attached hereto as Exhibit A.

Berwick Residents appeal the License because: (1) procedural inadequacies existed in the processing and issuance of the License; (2) the BI&MR facility was constructed without a permit to do so, in violation of, among other regulations, DEP Chapter 115(4), 06-096 CMR § 115(4); (3) BI&MR is required, as a new source and a synthetic minor source, to comply with BACT and federally enforceable operational limits that are not sufficiently referenced in the License; (4) the License lacks appropriate reporting and other requirements for enforcing applicable operational and emission limits; and (5) the License was issued without an adequate ambient air quality analysis. Berwick Residents respectfully request a public hearing on this important matter.

I. Aggrieved Party Status

An aggrieved person may appeal to the Board of Environmental Protection ("Board") for review of a licensing decision by the DEP Commissioner. See 06-096 CMR 2 § 24(B)(1). "Aggrieved person" means "any person whom the Board determines may suffer particularized injury as a result of a licensing or other decision." Id. at § 1(B). Berwick Residents meet this aggrieved party standard by the fact they all live adjacent to or very near the current BI&MR

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facility and as such, may suffer injury as a result of the licensing and operation of BI&MR's proposed automobile shredder operations.[1]

As residents along Route 236 in Berwick, Maine, which runs perpendicular to the facility, Berwick Residents have direct occasion to hear BI&MR's proposed automobile shredder in operation, to be directly affected by the truck traffic delivering vehicles to the facility for shredding or exiting with shredded cargo, to breath emissions from the diesel drive unit as it burns 150,000 gallons of diesel a year and to have auto shredder "fluff" residue airborne in their neighborhood as a result of BI&MR's 2,000 hours of annual operation. In particular, the Duffy's are direct abutters to the south-eastern edge of the BI&MR facility, the area in which the actual automobile shredder was built prior to issuance of any state or local permits. The Duffy's are very concerned about their exposure to harmful air pollutants as a result of emissions from both the diesel drive unit and the shredder unit.

II. Basis for the Appeal

BI&MR has already built a significant portion of its "proposed" auto shredding facility to date, despite lacking any Conditional Use Permit from the Town of Berwick, nor any state license. These actions also constitute a clear violation of DEP Chapter 115(4)[2] air rules. BI&MR is literally transforming itself from a metal recycling facility to a large-scale operation that will shred hundreds of crushed vehicles and other large scrap items a day into six-inch scrap metal pieces. See BI&MR June 16, 2010 New Source Application ("Application") at page 1, attached hereto as Exhibit B. "Non-ferrous metal, including aluminum, copper, plastic and foam" (*i.e.*, auto shredder residue, or "fluff") will also be created as a result of this new business operation. Id. The hammer-mill "Texas shredder" will be powered by a 3600 horsepower, 1967 General Motors diesel-fueled engine. See id. at pages 1-2. The shredder has an expected throughput of 50-100 tons *per hour*. See id. at page 1.

BI&MR is going from an operation that has no need for an air emission license to one that is licensed (with operational and fuel usage limits) to emit 20 tons of nitrogen oxide, 8.73 tons of carbon dioxide, 1.23 tons each of PM and PM_{10}, .92 tons of volatile organic compounds, and .02 tons of sulfur dioxide annually. See Exhibit A at page 4. This represents a dramatic change in the current air quality enjoyed in the Berwick Residents' neighborhood generally and the Duffy's back yard.

Moreover, it appears that BI&MR's License was not appropriately reviewed or issued by the Department. First, the DEP failed to process BI&MR's Application properly, thereby handicapping Berwick Resident's notice of, and ability to respond to, the issued License. Second, BI&MR began construction of their facility before obtaining the necessary licenses,

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[1] BI&MR is located at 106 Route 236 in Berwick, Maine. The Seivwrights live at 143 Route 236, Berwick, Maine; the Planches reside at 84 Route 236, Berwick, Maine; the Provenchers live at 132 Route 236, Berwick, Maine; and the Duffys are located at 128 Route 236, Berwick, Maine.

[2] 06-096 CMR § 115(4) states: "If the applicant is applying for a Major or Minor Modification or a new major or minor source license, the license must be issued by the Department prior to beginning actual construction of the modification or the new source."

including an air license. Third, the License does not reference all of the operational and emission standards that apply. Fourth, despite the disdain BI&MR appears to have for following state and local environmental regulations (as evidenced by their "build fast, permit later" approach) the DEP's License fails to require any robust reporting or means of monitoring BI&MR's hourly operating limitations. Last, DEP did not perform, and the License lacks, adequate ambient air quality analysis for BI&MR.

A. The DEP's Processing of BI&MR's Application was Procedurally Inadequate

The Air Bureau failed to process BI&MR's air license application appropriately. Pursuant to DEP's regulations, an applicant pursuing more than one application may be required to submit all other applications before any such application will be accepted as complete for processing. See 06-096 CMR 2 § 11(C). BI&MR's application was submitted to the Air Bureau on or about June 16, 2010. The very nature of that application (an air emissions license applicable to a new automobile shredder powered by a diesel drive unit) demonstrated that BI&MR also needed a Solid Waste Processing Facility License. However, that specific application was not sent to the DEP's Solid Waste Division until September 16, 2010. Because the Air Bureau had sufficient notice that additional licensing would be required by BI&MR, the processing of the Application should have been delayed until the Solid Waste Processing Facility application was submitted on September 16, 2010.

There also appear to have been anomalies with the public notice provided for receipt of the application and issuance of the License. It appears that the Air Bureau did not notify the Board by publishing the date it accepted BI&MR's Application as complete for processing. The report covering the time period between May 21, 2010 and September 9, 2010 as posted on the BEP website did not contain notice regarding the Air Bureau's acceptance for processing of BI&MR's Application. See 06-096 CMR Chapter 2 § 15. As a result, the general public was not afforded the ability to file a request for public hearing or BEP jurisdiction on BI&MR's Application, as provided under 06-096 CMR 2 § 17(A).

Attorney Tim Murphy sent a letter to the Air Bureau on October 19, 2010 that raised a number of concerns Berwick Residents had with the Application. He received no response from the Air Bureau. Further, Attorney Murphy did not receive a copy of BI&MR's License despite the fact that, pursuant to DEP Chapter 2 Rules, as a party that submitted written comments on a draft License, the DEP was required to provide him with a copy of the final License and notice of appeal rights. See 06-096 CMR 2 § 18(B). Only the Signed Department Licenses Filed with the Board ("EFIS") report, posted[3] on Board's website, alerted him to the fact that BI&MR's License was issued and filed with the Board on October 27, 2010.

On November 12, 2010, Attorney Murphy sent a letter to the Air Bureau requesting a copy of the License. He received no response. Only upon verbal request to the Air Bureau did

[3] According to the EFIS report, it was "printed" on November 5, 2010 – nine days after the decision was filed on October 27, 2010. It is unclear when the EFIS report was posted to the Board's website, as part of the Board Packet for the November 18, 2010 BEP meeting.

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he receive a copy of the signed License, on November 15, 2010 -- 18 days after the License had been filed with the BEP.[4] As a result, Berwick Residents had 12 days to review the License and to decide whether to file this appeal. Pursuant to Department rules, an aggrieved party has a 30 day window to lodge an appeal. See 06-096 CMR 2 § 24(B)(1).

The course of events described above demonstrate that the DEP has not provided the general public with adequate notice regarding the processing BI&MR's nor with the actual License and notice of appeal. Further, Berwick Residents' original concerns, voiced in the October 19th letter, were not adequately considered and addressed by the Department. The License incorporated none of their comments. Last, Berwick Residents have been handicapped by not receiving notice of the License until two weeks before the deadline for filing an appeal.

B. The License Does Not Contain All Applicable Limits

The operational limits that BI&MR must accept in the License to satisfy an application of Best Available Control Technology ("BACT") and qualify as a synthetic minor are not all reflected in the License. Pursuant to 06-096 CMR 115 § 4(B)(4)(d) the Diesel Drive Unit must undergo a BACT analysis. Furthermore, as a synthetic minor the facility must accept federally enforceable emissions limits and/or limits on the hours of operation.

BI&MR is currently licensed as a metal recycling facility in the Town of Berwick. However, to date, it has built at least 83% of its new automobile shredder operation, without any substantive local or state approvals. See Solid Waste Processing Facility Application at page 7, attached hereto as Exhibit C.[5] By moving forward to build its facility without first obtaining the necessary licenses (including an air permit) BI&MR has displayed a lack of concern for addressing and complying with regulatory requirements. Therefore, it is imperative that the License include operational controls, such as limits on BI&MR's hours of operations and robust reporting requirements, to document compliance with the License.

In its August 26, 2010 Addendum to its Application, BI&MR proposed that it would limit its shreddingoperations to 8 hours per day, 40 hours per week, and 50 weeks per year, for a total of 2,000 hours per year of operation. See Addendum at page 1, attached hereto as Exhibit D. This limit, which was meant to minimize peak daily and seasonal emissions, does not appear in the License. This operational limit as well as any other applicable limits should be included into the License. Without these limits, there is real danger that BI&MR could, and would, operate beyond this total of 2,000 annual hours and cause emissions beyond its licensed limits.

[4] The issued License at that time was not posted on the Air Bureau's Chapter 115 air license website, available at http://www.maine.gov/tools/whatsnew/index.php. As of November 23, 2010, the License is still not posted.
[5] Also included with Exhibit C are photographs taken by DEP staff in May of 2010 during a Site visit to BI&MR which show that constrtuction of the new automobile shredder facility was well underway.

C. The License Fails to Incorporate Adequate Monitoring and Enforcement Provisions for Fuel Use Tracking

The License also fails to institute needed enforcement provisions relating to the tracking of fuel usage. BI&MR has proposed to substantiate the amount of fuel it uses by way of fuel purchase records and inventory tracking. See Exhibit B at page 3. However, despite BI&MR's professed ability to self-regulate its fuel usage, it nonetheless has the opportunity to use more than 150,000 gallons per year. This is because diesel fuel will be kept at the BI&MR facility for "other portable or mobile equipment." Id. Moreover, the License itself permits BI&MR to build a common fuel storage tank to service the diesel drive unit and other mobile equipment on site.[6] See Exhibit A at page 9, ¶ 20. Although a separate fuel line is supposed to be installed and metered pursuant to Paragraph 20 of the License there, are no requirements that the facility maintain or file reports with the DEP documenting fuel usage for the diesel drive unit.

Furthermore, although the License does limit particulate matter emissions – PM and PM_{10} – it did not include any analysis regarding the operation of the shredder and the controls that will be used to limit dust emissions. The Application stated that BI&MR will operate water sprays to control dust to minimize visible emissions. See Exhibit B at pages 2-3. They also describe how process controls such as integrated hardware and software will "increase[] production efficiency, improve[] product, increase[] nonferrous recovery, and reduce[] power cost per ton." Id. at page 3. Berwick Residents would be enormously relieved if the License explained how the DEP assessed, tested and reviewed these assertions made by BI&MR regarding particulate matter. For example, has the DEP ever reviewed this type of shredder operation before, and if so, where? Has it seen an auto shredder in action, or done testing and monitoring of such an operation? Has it ever studied automobile fluff and its effects on human health and the environment? As the ultimate permitting agency for this type of activity, the DEP should be the entity that thoroughly reviews and scrutinizes the Applicant's claims. However, the License makes clear that this issue has not been thoroughly reviewed.

Additional controls mandated by the DEP for inventory tracking are necessary to prevent the possibility of BI&MR exceeding its proposed 2,000 operational hours per year and using diesel fuel in excess of 150,000 gallons. Monthly reporting requirements that will verify hours of operations and fuel usage are examples of such types of necessary controls. The DEP should also do a more rigorous analysis of the particulate matter emissions that will result from the operation of the shredder, which is located in close proximity to the Duffy's adjacent property.

D. The Air Bureau Failed to Perform, and the License Lacks, Adequate Ambient Air Quality Analysis.

The License devotes only two sentences to a discussion of BI&MR's ambient air quality analysis. This "discussion" is in actuality form language, which has been used in other air

[6] Note that although BI&MR has not apparently applied for any above-ground or below-ground storage tank permits from the State, it is hard to imagine how a facility that proposes to operate 2,000 hours a year, burn 150,000 gallons of diesel fuel annually and have a throughput of 50-100 tons per hour will not need significant fuel storage on site.

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licenses issued for diesel engine emissions, such as the license for Merrill Blueberry Farms, License Number A-836-71-D-R. See Exhibit E, attached hereto. Both applications, each of which allows 20 tons per year of Nitrogen oxide to be emitted, contain virtually no ambient air quality analysis. BI&MR's location in southern Maine alone merits a more rigorous analysis.

III. Evidence to be Presented

The License states that the Air Bureau reviewed BI&MR's license applications, as well as "staff investigation reports and other documents in the applicant's file" in making its decision to permit BI&MR's automobile shredder operation. Appeal at page 1. However, the License appears to take at face value the information provided in BI&MR's Application and Addendum. The License also used boilerplate language in describing BACT and ambient air quality analysis. Such action (or inaction) on behalf of the Air Bureau is not acceptable, and an appeal is necessary in order to have a true understanding of the BI&MR's operational emissions impacts.

As described above, Berwick Residents had only 12 days in which to determine whether to appeal this License. Such time is not sufficient to engage necessary air licensing expert consultants, charge them with assessing the Application and the License and receive final reports and/or draft testimony. However, this is exactly what Berwick Residents are willing to do should the BEP accept this appeal petition.

Berwick Residents reserve the right to show, by way of expert consultants, that the BI&MR Application is deserving of additional licensing controls. They will offer evidence that automobile shredder "fluff" is exceedingly dangerous to human health and the environment. Berwick Residents therefore reserve the right to list potential witnesses well in advance of a public hearing on this appeal.

IV. Remedy

Berwick Residents contend that BI&MR's Air Emissions Application merited additional study and closer attention by the Department than it received. Additional analysis regarding BACT and ambient air quality standards is absolutely necessary to determine whether BI&MR's proposed automobile shredder operational emissions are in fact appropriately limited to their currently licensed emission standards. In particular, automobile "fluff" particulates must be further scrutinized by the Department. Berwick Residents' previous comments and concerns to the Department went un-heeded. As a result, the Board's review is imperative to ensure BI&MR is in compliance with the State's air quality regulations. Therefore, Berwick Residents respectfully request that the BEP:

1. Modify the License to require additional operational controls on BI&MR to ensure strict compliance with hours of operation and fuel usage; and

2. Remand the rest and the remainder of the License to the DEP for a full technical review and analysis of BI&MR's BACT, ambient air quality standards and automobile shredder fluff particulate impacts.

Very truly yours,

David B. Van Slyke
Jeffrey D. Talbert
Tim Murphy
Counsel for Jeanette and Doug Seivwright, Robert and Donna Duffy, Tom and Carol Planche, and Joyce and Raymond Provencher

Encls.

cc: Beth Nagusky, DEP
James Brooks, DEP
Jeanette and Doug Seivwright
Robert and Donna Duffy
Tom and Carol Planche
Joyce and Raymond Provencher
Robert Brenna, BI&MR

EXHIBIT A

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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

BETH NAGUSKY
ACTING COMMISSIONER

Berwick Iron & Metal Recycling, Inc. York County Berwick, Maine A-1041-71-A-N (SM)	Departmental Findings of Fact and Order Air Emission License

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A Introduction

1. Berwick Iron & Metal Recycling, Inc. (Berwick) has applied for an Air Emission License permitting the operation of emission sources associated with their ferrous and non-ferrous metal recycling facility.

2. The equipment addressed in this license is located at 106 Route 236, Berwick ME.

B Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur	Stack #
Diesel Drive Unit	27.4	200	diesel, 0.0015%	1

Process Equipment

Equipment	Production Rate	Pollution Control Equipment
Texas Shredder Model 8104	100 TPH	Water Sprays

C. Application Classification

The new source is considered a major source based on whether or not expected emissions exceed the "Significant Emission Levels" as defined in the Department's regulations. The emissions for the new source are determined by the maximum future license allowed emissions, as follows:

Pollutant	Max. Future License (TPY)	Sig. Level
PM	1.2	100
PM_{10}	1.2	100
SO_2	0.1	100
NO_x	20.0	100
CO	8.7	100
VOC	0.9	50

The Department has determined the facility is a minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005). With the fuel limit on the Diesel Drive Unit, Berwick is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Diesel Drive Unit

The Diesel Drive is a 3600 horsepower, 20-cylinder turbocharged General-Motors Model 20-645-E3 diesel locomotive engine, with a rated fuel input of 200 gallons per hour. The unit is equipped with GM Ecotip fuel injectors which reduce visible emissions, PM, carbon monoxide and volatile organic compound emissions. The Diesel Drive was manufactured in 1967, therefore, it is not subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.*

Because of its size, the Diesel Drive is subject to the provisions 40 CFR Part 63, Subpart ZZZZ, including initial notification. Berwick shall provide to MEDEP a written compliance plan for Subpart ZZZZ prior to April 30, 2013.

A summary of the BACT analysis for the Diesel Drive is the following:

1. Berwick shall be limited to the use of 150,000 gallons per year of Diesel fuel in the Diesel Drive.
2. The Diesel Drive shall fire only diesel fuel with a maximum sulfur content not to exceed 15 ppm.
3. The Diesel Drive shall be equipped with Ecotip Injectors, a four pass Intercooler and ignition timing retard.
4. 06-096 CMR 103 regulates PM emission limits. The PM_{10} limits are derived from the PM limits.
5. NO_x emissions shall not exceed 20.0 tons per year based on a calendar year.
6. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
7. Berwick shall operate and maintain the Diesel Drive Unit in accordance with the manufacturer's written instructions. Berwick shall not change settings that are not approved in writing by the manufacturer. Berwick shall keep a copy of the manufacturer's written instructions on-site.
8. Visible emissions from the Diesel Drive shall not exceed 30 percent opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

C. Metal Shredder

The metal shredder is a Texas Shredder Model 8104, with a throughput capacity of 50 – 100 tons per hour, depending on the material being processed.

The potential emissions from the shredder are particulate matter from the physical impact of the shredder hammers on the materials as well as from the potential heating of the material by friction in the shredder. The shredder is equipped with water sprays which shall be used to minimize emissions. The shredder is equipped with an automatic system for controlling operations including the shredder feed rate, feed roll pressure, and engine throttle.

The shredder and the diesel drive unit are coupled with a reduction gear to ensure the shredder and the diesel drive unit both operate at their optimum speed to maximize useable torque and minimize emissions.

Visible emissions from the shredder shall not exceed 20 percent opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

D Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20 percent opacity, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour.

E General Process Emissions

Visible emissions from any general process source shall not exceed 20 percent opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

F. Annual Emissions

Berwick shall be restricted to the following annual emissions, based on a 12-month rolling total, and on annual fuel usage of 150,000 gallons of diesel fuel:

Total Licensed Annual Emissions for the Facility
Tons per year
(Used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Diesel Drive	1.23	1.23	0.02	20.00	8.73	0.92
Total TPY	**1.2**	**1.2**	**0.1**	**20.0**	**8.7**	**0.9**

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor new source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-1041-71-A-N subject to the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
2. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Diesel Drive Unit**

A. The Diesel Drive shall fire only diesel fuel with a maximum content not to exceed 15 PPM. [06-096 CMR 115, BACT]

B. Total fuel use for the Diesel Drive shall not exceed 150,000 gallons per year of diesel fuel based on a calendar year. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type of fuel delivered and sulfur content of the fuel. [06-096 CMR 115, BACT]

C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Diesel Drive Unit	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

D. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Diesel Drive Unit	3.29	3.29	0.04	52.06	23.29	2.47

E. Actual NOx emissions shall not exceed 20 tons per year, based on a calendar year. [06-096 CMR 115, BPT]
F. The Diesel Drive shall be equipped with Ecotip Injectors, a four pass Intercooler and ignition timing retard. [BPT]
G. Berwick shall operate and maintain the Diesel Drive Unit in accordance with the manufacturer's written instructions. Berwick shall not change settings that are not approved in writing by the manufacturer. [40 CFR 60.4211(a)]
H. Visible emissions from the Diesel Drive shall not exceed 30 percent opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]
I. Berwick shall provide to MEDEP a written compliance plan for 40 CFR Part 60, Subpart ZZZZ, prior to April 30, 2013.

(17) **Metal Shredder**

A. Berwick shall operate the water sprays at all times the shredder is in operation.
B. Visible emissions from the metal shredder shall not exceed 20 percent opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

(18) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed of 20 percent opacity, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour. [06-096 CMR 101]

(19) **Performance Test**

Berwick shall perform an initial performance test within 60 days after achieving the maximum production rate at which the facility shall be operated, but not later than 180 days after initial start-up of the facility. The performance test shall consist of Method 9 opacity testing, performed on both the Diesel Drive and the Shredder.

(20) Berwick may construct a common fuel storage tank to service the Diesel Drive and their mobile equipment. The fuel line to the Diesel Drive shall be metered.

(21) Berwick shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 27th DAY OF October, 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Pahlow
BETH NAGUSKY, ACTING COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 7/27/2010
Date of application acceptance: 7/27/2010

Date filed with the Board of Environmental Protection:

This Order prepared by N. Lynn Cornfield, Bureau of Air Quality.

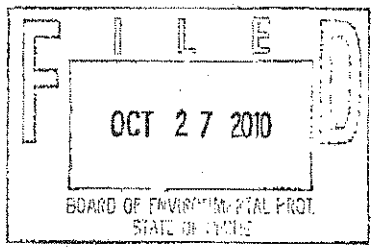

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EXHIBIT B

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Morrison
Environmental
Engineering

AIR EMISSION LICENSE
NEW SOURCE APPLICATION

BERWICK IRON AND METAL RECYCLING, INC.
BERWICK, MAINE

JUNE 2010

PREPARED BY:

Morrison Environmental Engineering, Inc.
16 Pine Meadow Lane
North Yarmouth, Maine 04097

ON BEHALF OF

Berwick Iron & Metal Recycling, Inc.
P.O. Box 366
Berwick, Maine 03901

FOR SUBMITTAL TO:

Maine Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, Maine 04333

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Morrison
Environmental
Engineering

June 16, 2010

Mr. Marc Cone
Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, Maine 04333-0017

Re: New Source Application
Berwick Iron & Metal Recycling, Inc.

Dear Mr. Cone:

On behalf of Berwick Iron & Metal Recycling, Inc. (BI&MR), Morrison Environmental Engineering, Inc. (MEE) is submitting an application for a new source air emission license. This application is being submitted in accordance with Department of Environmental Protection (DEP) Regulations, Chapter 115, "*Major and Minor Source Air Emission License Regulations.*" The application forms are included as Appendix A. Other required supporting documentation, including a United States Geological Survey Topographic Map, emission calculations, and public notice, are contained in the remaining appendices as detailed below.

Background

Berwick Iron & Metal Recycling, Inc. is a ferrous and non-ferrous metal recycling facility located on Route 236 in Berwick, Maine. Appendix B provides a United States Geological Survey (USGS) Topographic Map showing the facility location.

The facility is proposing to install and operate a metal shredder powered by a diesel engine rated at 3600 horsepower, to facilitate the recycling of cars and other large scrap items. The maximum rated fuel input for the diesel drive unit is 200 gallons per hour (GPH), which equates to 27.4 million British thermal units per hour (MMBtu/hr). The "hammer-mill" shredder will be used to process scrap metal to facilitate recycling. Large metal objects such as crushed cars will be processed to reduce the metal to a nominal six-inch size. The shredded metal will be divided into ferrous and non-ferrous components using a large eddy-current electromagnet. All ferrous and non-ferrous components, including aluminum, copper, plastic, and foam, will be sold for further processing.

The diesel engine is not subject to New Source Performance Standards under Title 40 of the Code of Federal Regulations Part 60 (40CFR60) Subpart IIII, "*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,*" as the unit was manufactured in 1967, and has not been reconstructed or modified as defined in that regulation.

The shredder is a "Texas Shredder" Model 8104 with an expected throughput of 50-100 tons per hour (TPH) depending on the type of material being processed. The shredder utilizes a

16 Pine Meadows Lane, North Yarmouth, Maine 04097
Phone/fax (207) 846-9897 ♦ meeinc@maine.rr.com

sophisticated computerized control system to maintain optimum engine loading and to minimize emissions.

The following tables summarize the facility's licensed equipment:

Emission Unit	Date of Construction	Maximum Design Capacity
SHREDDER		
Texas Shredder Model 8104	1988, controls updated 2006	50-100 TPH

Emission Unit	Date of Construction	Design Capacity	Maximum Firing Rate	Fuel Type (and % sulfur)
DIESEL ENGINE				
General Motors Model 20-645-E3	1967	27.4 MMBtu/hr	200 gal/hr	Diesel, 0.05%

Note: TPH – Tons per hour
MMBtu/hr – million British thermal units per hour
gal/hr – gallons per hour

BI&MR performs additional operations listed as "insignificant or trivial activities" pursuant to Chapter 115, Appendix B. These activities and/or equipment are not required to be listed in the application or to be licensed.

Best Available Control Technology (BACT)

For any new or modified emission unit, a facility is required to demonstrate that the unit to be constructed, reconstructed or modified will receive Best Available Control Technology (BACT). BACT is defined as an emission limitation based on the maximum degree of reduction for each pollutant emitted through the application of production processes or available methods, systems, and techniques taking into account energy, environmental, and economic impacts and other costs.

BI&MR proposes the following to meet the requirements of BACT:

Shredder

The potential emissions from the shredder consist of particulate matter (PM and PM10) generated from the physical impact of the shredder hammers on the materials, as well as from the potential heating of the material by the friction in the shredder. The shredder is equipped with water sprays, which will be utilized as needed to minimize visible emissions, thereby minimizing PM emissions. In addition, several new process controls are incorporated in this

shredder, to minimize process emissions and reduce energy usage, which will in turn reduce emissions from the diesel drive unit.

The controls for the shredder process include integrated hardware and software. The plant is equipped with an automatic system for controlling operations such as shredder feed rate, feed roll pressure, engine throttle position, etc. By monitoring relevant variables, these controls maximize drive motor performance and control the feed rate, resulting in increased production efficiency, improved product, increased nonferrous recovery, and reduced power cost per ton. This reduced energy consumption also means that the engine fuel use will be minimized and that the loading is more consistent, reducing the potential for surging and/or lugging, thereby minimizing visible PM emissions from the drive unit.

Another important development in this generation of shredder is an improved power coupling between the drive unit and the shredder. Previous shredders were most often direct-coupled to the drive units at a one to one ratio, which meant that the shredder speed and engine speed were the same in terms of revolutions per minute (RPMs). This resulted in an imperfect compromise between shredder speed and engine speed, with the shredder either running too fast, and/or the engine running too slow for optimum performance. This tended to increase the potential for excessive heating of the metal being processed, which resulted in higher PM emissions, and would also lead to excessive wear on the shredder itself. Also, if the diesel drive unit operates at too low a speed, it may not operate at full output torque, making the unit prone to excessive lugging which can cause elevated PM emissions. BI&MR's proposed shredder uses a simple reduction gear to ensure that the shredder and diesel drive unit both operate at their optimum RPM range to maximize usable torque and minimize emissions. The shredder mill is expected to operate at approximately 600 RPMs, while the engine operates at approximately 850-900 RPMs.

Diesel Drive Unit

A 3600 HP 20-cylinder turbocharged General-Motors Model 3410 diesel locomotive engine is proposed to be used to provide power for the shredder. The following is a summary of the control systems proposed to meet the requirements of BACT for this engine.

The unit will burn low sulfur diesel fuel, with a maximum sulfur content of 0.05%. BI&MR is proposing a fuel limit of 300,000 gallons per year, based on 150 GPH, 40 hours per week, and 50 weeks per year of operation. Fuel use will be tracked through purchase records. In the future, the diesel fuel may be directly piped from a nearby bulk fuel tank, which may also be used to fuel other portable or mobile equipment. In that case, the fuel used will be tracked by inventory, i.e.: subtracting the dispenser total from the purchase amounts.

BI&MR will ensure good combustion and maintenance practices for the proper operation of the diesel drive unit. The unit has been fitted with GM Ecotip fuel injectors, which are designed to improve the fuel input pattern and improve fuel efficiency. These injectors reduce visible emissions, PM, carbon monoxide (CO), and volatile organic compound (VOC) emissions significantly, compared to standard injectors. This improves the ability for retarding the timing in order to reduce NOx emissions.

Turbocharged engines use a turbine in the exhaust stream to power a separate compressor turbine in the air intake manifold. This increases the combustion air pressure, which improves engine performance. Unfortunately, a potential drawback with a standard turbocharger is that the adiabatic heating caused by compressing the combustion air can have the tendency to increase NOx emissions. The engine that BI&MR proposes to use was originally equipped with a two-pass aftercooler following the turbocharger, which cools the compressed air in the airbox. This cooling helps increase the density of the combustion air, which increases the density of the air entering the engine, further improving engine performance. BI&MR is proposing to replace the two-pass aftercooler with a four-pass aftercooler, which helps to decrease NOx formation by further decreasing the combustion air temperature. The four-pass aftercooler is manufactured by GM/Electro-Motive, which is the original equipment manufacturer (OEM) for this engine, ensuring that this retrofit is appropriate for this engine. The manufacturer has conducted testing showing that the four-pass aftercooler can reduce NOx emissions by 15% at full load, compared to the standard two-pass model.

The high power rating of the engine will help to prevent excessive engine lugging under load, which will help control visible emissions. Earlier shredders were often coupled with smaller engines, which could be bogged down during loading, potentially leading to concerns about visible emission. This proposed unit is expected to have sufficient power to operate more steadily, especially when used in conjunction with the automated controls described previously.

Emissions tables showing the potential emissions as well as the proposed controlled emissions are included in Appendix C. The proposed emissions are based on the United States Environmental Protection Agency (EPA) AP-42, "*Compilation of Air Pollutant Emission Factors, Volume I*", Table 3.4-1 for Large Stationary Diesels. The controlled NOx emissions values were based on the use of ignition timing retard. The combination of this control as well as the use of an annual fuel limit will control emissions to a level that additional add-on controls would not be economically feasible considering the type of facility and expected mode of operation.

Regulatory Standards

Maine Regulations

Chapter 101, *Visible Emissions Regulation*, establishes opacity standards for process operations and fuel burning equipment. Visible emissions from the shredder would be considered "fugitive emissions" according to Maine DEP regulations. Visible emissions from the shredder will need to meet a limit of 20 percent opacity, except for no more than five (5) minutes in any 1-hour period. Compliance will be determined by an aggregate of the individual 15-second opacity observations which may exceed 20 percent in any hour. Visible emissions from the diesel engine will be regulated as "stationary internal combustion units manufactured prior to calendar year 2000", and "shall not exceed an opacity of 30 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period."

Chapter 103, *Fuel Burning Equipment Particulate Emission Standard*, establishes an emission standard for particulate matter based on the type of fuel fired and the date of installation. Chapter 103 requires the diesel drive unit to meet a particulate emissions limit of 0.12 lb/MMBtu.

Chapter 115, "*Major and Minor Source Air Emission License Regulations,*" implements new source review and licensing requirements for facilities that have the potential to emit regulated pollutants at a level defined as a major or minor source. BI&MR is requesting a minor source license in accordance with this regulation.

Chapter 137, *"Emission Statements,"* establishes requirements for the reporting of emissions from certain sources of air pollution. Based on the minimal potential facility emissions, BI&MR is not subject to the requirement to submit annual emission statements to the DEP.

Chapter 148, *"Emissions from Smaller-Scale Electric Generating Resources,"* was promulgated on August 9, 2004 and affects any non-mobile electric generators having a capacity greater than or equal to 50 kW and installed on or after January 1, 2005. BI&MR proposes to install and operate a diesel engine to directly drive the shredder, and does not propose to operate any electric generating units at this time.

Federal Regulations

Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subpart IIII: "*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,*" applies to diesel generators and other stationary diesels that commence construction, modification, or reconstruction after July 11, 2005 (as defined in 40CFR60). The proposed diesel engine was manufactured in 1967, and has not been modified or reconstructed.

Facility Air Emissions

Emission calculations were completed for the diesel drive unit and are provided in pounds per hour as well as tons per year. Emission calculations were estimated using the United States Environmental Protection Agency's (USEPA's) *Compilation of Air Pollution Emission Factors, Fifth Edition* (AP-42), DEP air quality regulations, mass balance techniques, and BACT findings.

Potential emissions are typically based on equipment operating at full capacity for 8,760 hours per year unless enforceable limits are imposed in a license. BI&MR has proposed to meet a fuel use limit of 300,000 gallons per year of low sulfur diesel. Therefore, potential emissions from the diesel unit are based on using low-sulfur diesel fuel and limiting annual fuel use. Table 1 of Appendix C contains the hourly and annual potential emissions for the diesel drive unit.

PM and PM10 emissions from the shredder will be controlled by the use of water sprays and are considered unquantifiable. The emissions from this process are regulated by a visible emission limit as described previously.

An annual emission fee, based on licensed potential emissions, is required for all licensed sources. Based on the proposed emissions limitations, the calculated emissions fee is below the minimum fee, therefore the fee will be the minimum fee of $353.00, as shown in Table 2. For new sources, the emission fee is required to be submitted at the time of the license application.

Public Notice

Appendix D contains a copy of the public notice text, which will run on June 17, 2010 in the Foster's Daily Democrat. A copy of the newspaper tear sheet will be submitted as soon as it is available.

If you have any questions regarding this application or if additional information is needed to accept this application as complete for processing, please call Alan Morrison at (207) 846-9897.

Very truly yours,

Alan Morrison

Alan Morrison
Vice President

Enc: Appendix A – Application Forms
Appendix B – USGS Topographic Map
Appendix C – Emissions Tables
Appendix D – Public Notice

cc: Mr. Robert Brenna, President, Berwick Iron and Metal Recycling, Inc.
Town Clerk, Berwick Town Hall

Appendix A

Application Forms

Form No.	A-L-0006
Effective Date	2/15/06
Revision No.	05
Last Revision Date	12/2005
	Page 1 of 10

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CHAPTER 115
AIR EMISSION LICENSE APPLICATION FORMS

State of Maine
Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, Maine 04333-0017
phone: (207) 287-2437 fax: (207) 287-7641

Section A: FACILITY INFORMATION

Facility Name to Appear on License: Berwick Iron and Metal Recycling, Inc.

Physical Location: Route 236 City/Town: Berwick County: York

Facility Mailing Address: P.O. Box 366
City/Town: Berwick Zip Code: 03901
Facility Phone Number: (207) 698-9933

Facility / Application Description:

Berwick Iron and Metal Recycling, Inc. is a ferrous and non-ferrous metal recycling facility.

Berwick Iron and Metal Recycling, Inc. is submitting an application for an air emission license for the operation of a diesel powered metal shredder at their facility.

Current License #: A-
Application #: A- ____ - ____ - ____ - ____ (to be filled in by the Department)

Check When Done:
- x Application Completed
- x Copy Sent to Town (date sent: June 16, 2010)
- x Public Notice Published
  (paper name: Foster's Daily Democrat date: June 17, 2010
- x Enclosed Public Notice Tear Sheet (to follow when available)
- x Signed Signatory Form (section J)
- N/A If applicable, notified abutting landowners (major modification)
- x If applicable, enclosed check for fee (new sources)

Facility Contact:

Name: Robert Brenna Title: President
Mailing Address: P.O. Box 366
City/Town: Berwick Zip Code: 03901
Phone: (207) 698-9933 Fax: (207) 698-9931
e-mail: rob.bimr@myfairpoint.com

Application Contact:

Name: Alan Morrison Title: Vice President
Mailing Address: Morrison Environmental Engineering. Inc.
16 Pine Meadows Lane
City/Town: North Yarmouth Zip Code: 04097
Phone: (207) 846-9897 Fax: (207) 846-9897
e-mail: meeinc@maine.rr.com

Billing Contact:

Name: Robert Brenna Title: President
Mailing Address: P.O. Box 366
City/Town: Berwick Zip Code: 03901
Phone: (207) 698-9933 Fax: (207) 698-9931
e-mail: rob.bimr@myfairpoint.com

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Section B: FUEL BURNING EQUIPMENT

Emission Unit #	Type of Equipment (boiler, furnace, engine, etc)	Maximum Design Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type (and %sulfur)	Date of Manufacture	Date of Installation	Stack #	Control Device
Diesel Drive Unit	IC Engine	27.4	200	Diesel, 0.05%	1967	2010	1	Timing Retarded

Monitors for Fuel Burning Equipment:

If applicable, indicate types of required/operated monitors, including Continuous Emission Monitors (CEM), Continuous Opacity Monitors (COM), parameter monitors for operational purposes, etc.

Emission Unit #	Type of Monitor	Data Measured
(example) Boiler #1	*CEM*	*NO_X*

Section C: INCINERATORS

N/A

	Incinerator Unit 1	Incinerator Unit 2
Incinerator Type (medical waste, municipal, etc.)		
Waste Type		
Make (Shenandoah, Crawford, etc.)		
Model Number		
Date of Manufacture		
Date of Installation		
Number of Chambers		
Max. Design Feed Rate (per load)	lb	lb
Max. Design Combustion Rate	lb/hr	lb/hr
Heat Recovery? (Yes or No)		
Retention Time	seconds	seconds
Automatic Feeder? (Yes or No)		
Temperature Range Primary	to °F	to °F
Secondary	to °F	to °F
Auxiliary Burner - Primary Chamber max. rating (MMBtu/hr)		
type of fuel used		
Auxiliary Burner - Secondary Chamber max. rating (MMBtu/hr)		
type of fuel used		
Annual Waste Combusted for (yr)		
Pollution Control Equipment (if any)		
Stack Number		
Monitors (ie - temperature recorder)		

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Section D: PROCESS EQUIPMENT

N/A

Emission Unit #	Type of Equipment	Maximum Raw Material Process Rate (name and rate)	Maximum Finished Material Process Rate (name and rate)	Date of Manufacture	Date of Installation	Stack #	Control Device
Kilns (example)	*Drying Kilns*	*N/A*	*25 MMBF/year*	*1990*	*1990*	*N/A*	*None*
Shredder	Metal Shredder	50-100 tons/hr	50-100 tons/hr	1988	2010	NA	Water sprays

Parts Washers/Solvent Degreasers

Emission Unit #	Capacity (gallons)	Solvent Used
Degreaser #1 (Example)	*15 (Example)*	*Kerosene (Example)*
N/A		

PROCESS EQUIPMENT (section D cont'd)

Chemical Usage

Note: Complete this section for any chemicals integral to the process unit, for example, a cementing process for outersoles, dyes, surface coating, printing, cleaning, etc. Attach additional pages or MSDS sheets as needed.

Process	Chemical compound used in process	Actual Compound Usage (gal or lb for yr ____)	Hazardous chemical(s) in compound	Percent VOC[1] (%)	Percent HAP[2] (%)	Total VOC emitted (lb/year)	Total HAP emitted (lb/year)
N/A							

[1]Volatile Organic Compounds
[2]Hazardous Air Pollutants

Describe method of recordkeeping (ie. monthly calculations from purchase records, flow monitors on solvent tanks, etc.)

Describe method used to calculate VOC/HAP emitted (ie – test results, if control equipment was taken into account; if conditions exist where solvents remain in the substrate rather than complete volatilization, etc.)

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Section E: STACK DATA

Stack #	Height above ground (ft)	Inside Diameter (ft)	Exit Temperature °F	Exhaust Flow Rate (ft^3/sec) (indicate actual or standard)
1	32.0 ft	2	725	365

Section F: ANNUAL FACILITY FUEL USE

Total Fuel Consumption by Month for: NA (year)

	Fuel Type: Low Sulfur Diesel	Fuel Type:	Fuel Type:
Avg % sulfur (oil)	0.05%		
Avg % moisture (wood)	NA		
	(Circle one: **gals**, tons, scf)	(Circle one: gals, tons, ccf)	(Circle one: gals, tons, scf)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
Total			
Proposed Annual Limit	300,000		

Section G: LIQUID ORGANIC MATERIAL STORAGE

Tank #					
Capacity (gallons)					
Materials Stored					
Reid Vapor Pressure					
Annual Throughput					
Above or Below Ground?					
Tank Type (floating or fixed, riveted or bolted, etc.)					
Physical Description – year installed					
Physical Description – color					
Dimensions – height (ft)					
Dimensions - diameter (ft)					
Construction Type					
Control Device					

Section H: MISCELLANEOUS

Note: Use this section to describe any equipment, activities, or other air emission sources that did not fit in any of the above categories. Include descriptions of the associated emissions. Attach additional pages if necessary.

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Section I: BPT/BACT AND OTHER ATTACHMENTS

BPT/BACT Analysis:

For license renewals for existing equipment, applicants are required to submit a Best Practical Treatment (BPT) analysis to the Department. A BPT analysis establishes what equipment or requirements are appropriate for control or reduction of emissions of regulated pollutants to the lowest possible level considering the existing state of technology, the effectiveness of available alternatives, and the economic feasibility.

For new licenses or the addition of new equipment to existing licenses, applicants are required to submit a Best Available Control Technology (BACT) analysis. A BACT analysis is a top-down approach to selecting air emission controls. It is done on a case-by-case basis and develops emission limits based on the maximum degree of reduction for each pollutant emitted taking into account economic, environmental and energy impacts.

☐ I certify that, to the best of my knowledge, the control equipment, fuel limitations, and process constraints outlined in this application represent BPT/BACT for the equipment and processes listed.

OR

☒ I have attached a separate BPT / BACT analysis to this application.

Other Attachments:

Please list any attachments included with this application.

Cover Letter/BACT
Appendix A – Application Forms
Appendix B – USGS Map
Appendix C – Emissions Tables
Appendix D – Public Notice

Section J: SIGNATORY REQUIREMENT

Each application submitted to the Department must include the following certification signed by a Responsible Official*:

"I certify under penalty of law that, based on information and belief formed after reasonable inquiry, I believe the information included in the attached document is true, complete, and accurate."

Responsible Official Signature	June 17, 2010 *Date*
Robert Brenna *Responsible Official (Printed or Typed)*	President *Title*

*A Responsible Official is defined by MEDEP Chapter 100 as:

A. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(1) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(2) The delegation of authority to such representatives is approved in advance by the permitting authority;

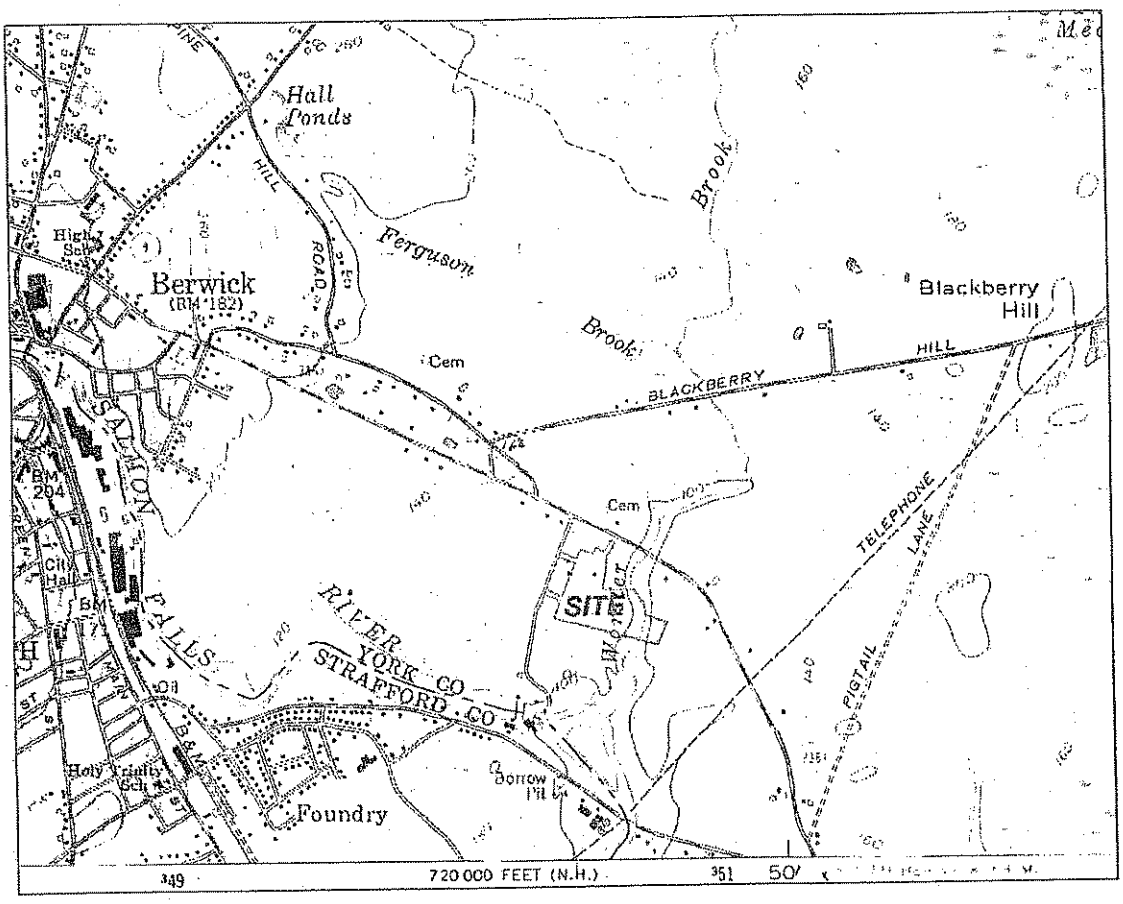
B. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

C. For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

Appendix B

USGS Map

SECTION 3
TOPOGRAPHIC MAP



Portion of

U.S.G.S. SOMERSWORTH, MAINE - N.H. QUADRANGLE

7.5 Minute Series (TOPOGRAPHIC)

1" ≈ 2000'

1958 (Photorevised 1973

Appendix C

Emissions Tables

TABLE 1
Controlled Hourly and Annual Emissions from Diesel Drive Unit

Berwick Iron and Metal Recycling, Inc.
Berwick, Maine

POTENTIAL HOURLY EMISSIONS WITH TIMING RETARDED

Unit	Maximum Fuel Input (gal/hr)	SO_2 Emissions	NOx Emissions	CO Emissions	PM_{10} Emissions	VOC Emissions
Diesel Engine Emission Factors[1,2,3]		**0.05 lbs/MMBtu**	**1.9 lbs/MMBtu**	**0.85 lbs/MMBtu**	**0.12 lbs/MMBtu**	**0.09 lbs/MMBtu**
Typical Expected	150	1.03 lbs/hr	39.05 lbs/hr	17.47 lbs/hr	2.47 lbs/hr	1.85 lbs/hr
Maximum Rated	200	1.37 lbs/hr	52.06 lbs/hr	23.29 lbs/hr	3.29 lbs/hr	2.47 lbs/hr

ANNUAL EMISSIONS WITH LIMITED FUEL USE AND TIMING RETARDED

Unit	Maximum Expected Fuel Input (gal/hr)	Potential Hours of Operation	Potential Fuel Usage (gal)	Potential SO_2 Emissions	Potential NOx Emissions	Potential CO Emissions	Potential PM_{10} Emissions	Potential VOC Emissions
Diesel Engine Emission Factors[1,2,3]				**0.05 lbs/MMBtu**	**1.9 lbs/MMBtu**	**0.85 lbs/MMBtu**	**0.12 lbs/MMBtu**	**0.09 lbs/MMBtu**
Diesel Engine	150	2000	300,000	2,055.0 lbs	78,090.0 lbs	34,935.0 lbs	4,932.0 lbs	3,699.0 lbs
Total Emissions in lbs				2,055.0 lbs	78,090.0 lbs	34,935.0 lbs	4,932.0 lbs	3,699.0 lbs
Total Emissions in tons				1.03 tons	39.05 tons	17.47 tons	2.47 tons	1.85 tons

1. SO2 emission factor based on mass balance calculation assuming a fuel sulfur content of 0.05%.
2. NOx, CO, PM10, and VOC emission factors based on EPA AP-42, *Compilation of Air Pollutant Emission Factors, Volume I*", Table 3.4-1 for Large Stationary Diesels
3. Potential emissions based on proposed license limit of 2000 hours of operation per year, and "typical" high fuel flow rate.
4. Diesel Heating Value assumed to be 0.137 MMBtu/gal.

TABLE 2
Fee Calculation

Berwick Iron and Metal Recycling, Inc.

Potential Facility Emissions	
SO2	1.0 tons/yr
NOx	39.0 tons/yr
PM	2.5 tons/yr
VOC	1.8 tons/yr
Total	**44.4 tons/yr**

Note: CO is not included in the fee calculations.

2010 Air Emission Fees	
from 1 to 1000 tons	$7.69 per ton
1001 to 4000 tons	$15.41 per ton
over 4001 tons	$23.08 per ton

minimum fee	$353.00
maximum fee	$212,593.00

Facility Fee = 44.4 tons x $7.69 = $341.44 <$353.00

Therefore, fee is	**$353.00**

Appendix D

Public Notice

1. *For Renewals, New Minor Sources, Minor Modifications and Transfers: To be advertised once by the applicant in a newspaper of general circulation in the area of the project location, within 30 days prior to the filing of the application.*
2. *For New Major Source Licenses and Major Modifications: To be advertised for three consecutive weeks in the public notice section of a Sunday or weekend newspaper of general circulation in the region in which the source is located.*
3. *For major modifications, new major sources, new Part 70 sources, or transfers this notice must also be mailed by certified mail to all abutting landowners, within 30 days prior to the filing of the application.*
4. *One copy of each of the "published" notices are to be submitted with the application.*

PUBLIC NOTICE OF INTENT TO FILE

Please take notice that **Berwick Iron & Metal Recycling, Inc., 106 Route 236, Berwick (207) 698-9933**
(name, address, and phone number of applicant)
intends to file Air Emission License applications with the Maine Department of Environmental Protection (DEP) pursuant to the provisions of 38 M.R.S.A., Section 590
on **June 18, 2010** The applications are **to obtain air emission licenses**
(submittal date)
for the operation of a metal shredder and diesel drive unit.
(summary of project)

According to Department regulations, interested parties must be publicly notified, written comments invited, and if justified, an opportunity for public hearing given. A request for a public hearing or for the Board of Environmental Protection to assume jurisdiction must be received by the Department, in writing, no later than 20 days after the applications are accepted by the Department as complete for processing.

The applications and supporting documentation are available for review at the Bureau of Air Quality (BAQ) DEP offices in Augusta, (207) 287-2437, during normal working hours. A copy of the applications and supporting documentation will also be available at the municipal offices in **Berwick,** Maine.
(town)

Written public comments may be sent to **Marc Cone** at the Bureau of Air
(project manager)
Quality, State House Station #17, Augusta, Maine 04333.

2 of 2

5604

54-153/114
455

BERWICK IRON & METAL RECYCLING
106 ROUTE 236
BERWICK, ME 03901
(207)698-9933

EXPLANATION	AMOUNT	

PAY AMOUNT OF Three Hundred and fifty three and no/100 DOLLARS

Security Features Details on Back.

DATE	TO THE ORDER OF	GROSS	DESCRIPTION	CHECK NUMBER
6/17/10	Treasure State of Maine		permit Fee	5604

$ 353.00

CITIZENS BANK
NEW HAMPSHIRE

AUTHORIZED SIGNATURE

A/MEPF Inc

NK168

GUARDIAN®SAFETY

⑈005604⑈ ⑆011401533⑆ 3311166061⑈

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Foster's Daily Democrat 1873

Publication Date:

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...ULTANTS

...ILE BERWICK IRON & METAL

Foster's Daily Democrat

Classifieds

Thursday, June 17, 2010

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Announcements | Announcements

17 Public Notice | 17 Public Notice

PUBLIC NOTICE OF INTENT TO FILE

Please take notice that Berwick Iron & Metal Recycling, Inc., 106 Route 236, Berwick (207)698-9933 intends to file Air Emission License applications with the Maine Department of Envi-

The Dover School District and Joint Building Committee are seeking qualified prospective bidders to provide proposals for the Design/Build - Photovoltaic System at the Horne Street Elementary School located at 78 Horne Street, Dover, NH.

Specifications may be obtained from the Office of the Superintendent by calling 603-516-6800 or by going online at:

http://www.dover.k12.nh.us/education/components/scrapbook/default.php?sectiondetailid=1050&

A mandatory pre-bid meeting will be held on Thursday, June 24, 2010 at 2:00 pm at the construction site. Prospective bidders who attend the mandatory pre-bid meeting will be allowed to submit a proposal. Sealed bids will be accepted until 11:00 am on Friday, July 2, 2010. No bids will be accepted after that time and date. Bids must be submitted by postal mail or hand-carried to: Office of the Superintendent, McConnell Center, 61 Locust Street, Suite 409, Dover, NH 03820.

Questions concerning the bid documents should be directed to Michael Bliss, Clerk of the Works, at (603) 817-0917.

MILTON SCHOOL DISTRICT
OFFICE OF THE SUPERINTENDENT
18 Commerce Way Unit #1
Milton, NH 03851
603-652-0262

INVITATION TO BID
1890 BUILDING; ROOF, DORMER, CUPOLA PROJECT

The Milton School District is accepting sealed bids for the roof replacement, dormer and cupola repair project at the Nute High School, in Milton, NH.

The guidelines describing the scope of the work may be obtained at the Superintendent's Office, 18 Commerce Way Unit #1, Milton, NH 03851, Toby Eaton, 603-652-0262 or at the Nute High School & Library Office by calling Bob at 603-652-4591. All bids, clearly marked "1890 BUILDING; ROOF, DORMER, CUPOLA PROJECT" must be returned to the Superintendent's Office by 2:00 PM on Thursday, June 24, 2010.

The Milton School District reserves the right to accept, reject, modify or negotiate any and/or all bids, or any portion thereof, in the best interest of the Milton School District.

18 Request for Bids | 18 Request for Bids

WAKEFIELD SCHOOL DISTRICT
OFFICE OF THE SUPERINTENDENT
18 Commerce Way Unit #1
Milton, NH 03851
603-652-0262

INVITATION TO BID
PAUL SCHOOL ROOF REPAIR/REPLACEMENT

The Wakefield School District is accepting sealed bids for the replacement of the membrane roof section at the Paul School,

18 Request for Bids | 18 Request for Bids

ORCSD Lenovo June 2010 RFP

The Oyster River Cooperative School District is accepting bids on an RFP for Lenovo computers. For a bid package, please email Sonja Gonzalez at Oyster River Cooperative School District Information Technologies Office <sgonzalez@orcsd.org>. Please include in the subject "Request for Lenovo June 2010 RFP". Bids are due June 25, 2010 at 3pm.

Employment | Employment | Personals

146 Help Wanted | 146 Help Wanted | 22 Adoption

CONSTRUCTION HELP

Looking to fill the following positions for up coming projects Superintendents, Pipe Foreperson, Pipe Layers, equipment operators,Laborers, CDL drivers for Trailers and Tri-axles.

ADOPT: A nurturing, financially secure LOVING HOME waits for 1st baby to LOVE forever. Expenses paid. Call Lisa

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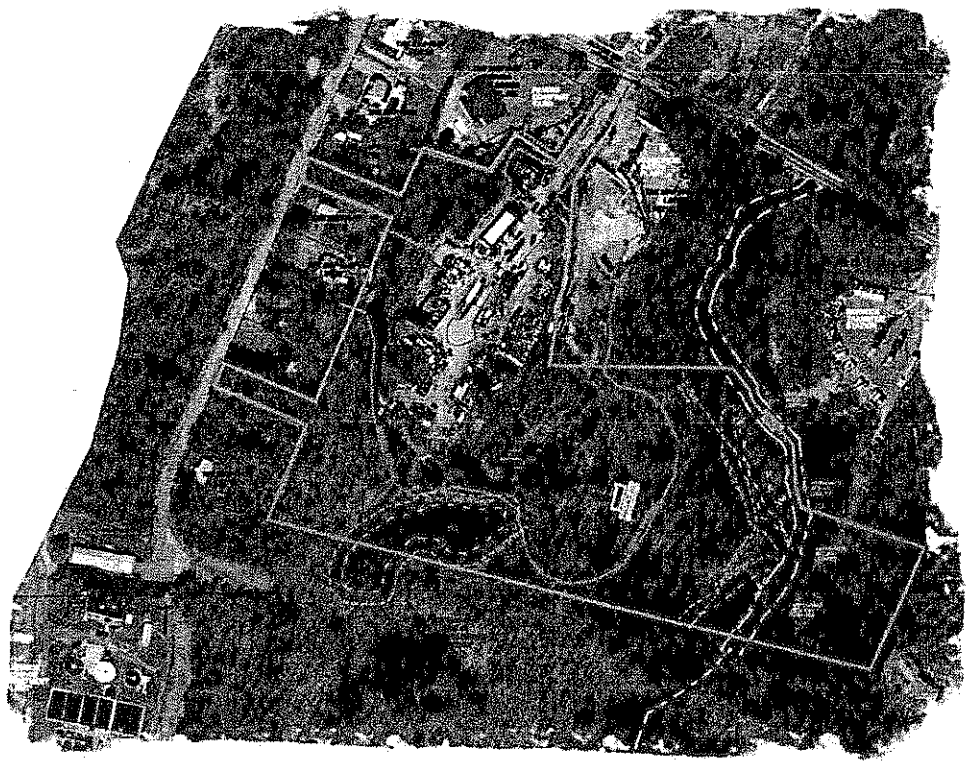
EXHIBIT C

251

Maine DEP Application
For A Solid Waste Processing Facility

Applicant: Robert Brenna
Berwick Iron & Metal Recycling Facility
106 Route 236
Berwick, ME 03901

MeDEP SOLID WASTE PROCESSING PERMIT APPLICATION DOCUMENTS



Date: September 2010

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CIVIL
CONSULTANTS

P.O. Box 100 South Berwick, Maine 03908 207-384-2550

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SECTION 7

FINANCIAL ABILITY

A. Estimated Cost to construct shredder complex

The Sitework budget breakdown for major items within the project is as follows:

Item	Cost
Concrete base & appurtenances (*)	$60,000
Control Building (including electric room) (**)	$5,000
Site Grading (*)	$30,000
Site Paving	$20,000
Shredder, Magnetic Separator & Power supply (**)	$1,050,000
Noise Abatement	$35,000
Waterline & Fire Hydrant	$35,000
Erosion Control (**)	$6,000
Plantings (berm) (**)	$35,000
Ground Surface Treatment (for Storage)	$35,000
Utilities (electric) (*)	$9,000
Miscellaneous	$100,000
Estimated Total	$1,425,000
Less completed/purchased	Approx $1,165,500
Remaining	$259,500

(*) Item already purchased or completed. (**) Item partially purchased or completed

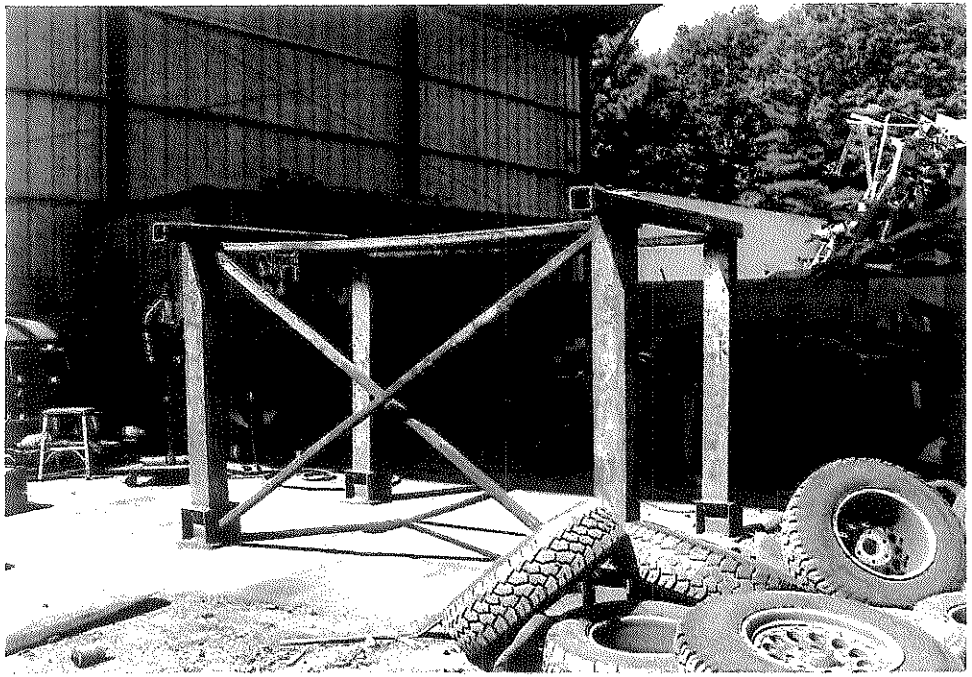
B. Financing

1. Letter of Commitment to fund. N/A
2. Self Financing.

The applicant intends to self finance. As noted in the table, the applicant has already purchased and/or completed approximately 82% of the total work/estimated cost.

A copy of a letter from the applicant's Bank attesting to the applicant's financial capacity is found on the next page.

Berwick Iron & metal 27 MAY 10



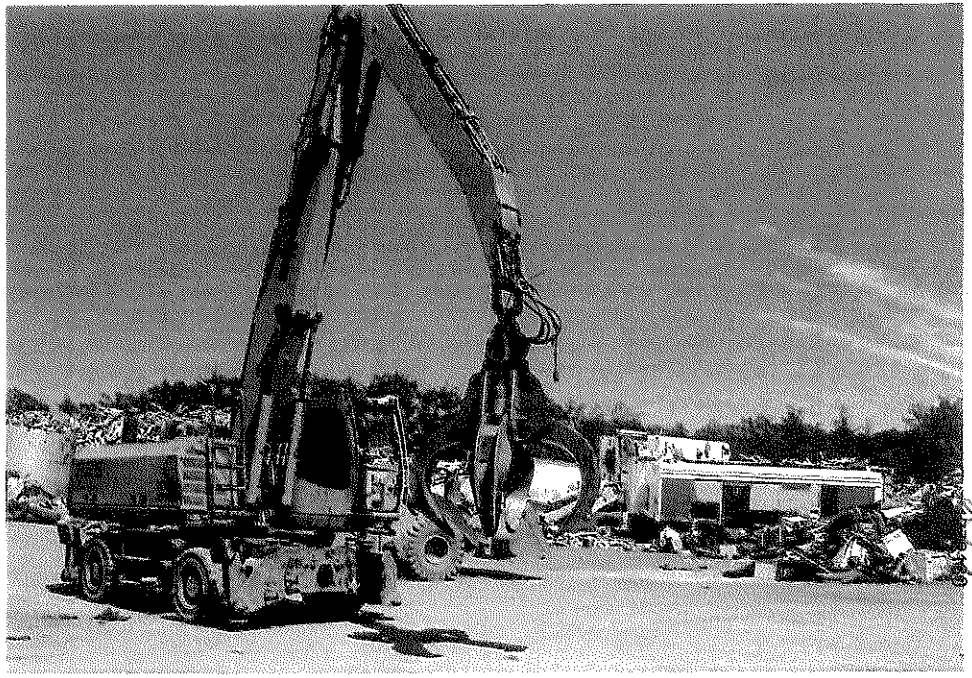


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EXHIBIT D

254

Morrison
Environmental
Engineering

August 26, 2010

Ms. Lynn Cornfield
Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, Maine 04333-0017

Re: Addendum to NOx BACT Evaluation
Berwick Iron & Metal Recycling, Inc.

Dear Ms. Cornfield:

On behalf of Berwick Iron & Metal Recycling, Inc. (BI&MR), Morrison Environmental Engineering, Inc. (MEE) is submitting an addendum to the Best Available Control Technology (BACT) evaluation conducted for the proposed emissions of oxides of nitrogen (NOx).

Diesel Drive Unit

A 3600 HP 20-cylinder turbocharged General-Motors Model 3410 diesel locomotive engine is proposed to be used to provide power for the shredder. The following is a summary of the control systems proposed to meet the requirements of BACT for this engine.

BI&MR has found that a similar unit operating out of state has tracked their actual fuel use and found that they average about 45 gallons per hour. Therefore, BI&MR is now willing to accept a lower annual fuel use limit than originally proposed. BI&MR is proposing a reduced fuel limit of 150,000 gallons of low sulfur diesel fuel per year, based on an estimated average fuel use of less than 75 gallons per hour.

BI&MR further proposes to minimize peak daily and seasonal emissions by limiting operations to 8 hours per day, 40 hours per week, and 50 weeks per year, for a total of 2000 hours per year of operation. Hours will be tracked through the use of a non-resettable hour meter. Fuel use will be tracked through purchase records and inventory tracking.

Based on the revised fuel use proposal, NOx emissions would be limited to 19.5 tons per year (TPY). A review of BACT determinations for other diesel units in Maine shows that BACT is often based on the limitation of NOx to a specific ton per year value of 20 TPY or less. The proposed annual NOx limit of 19.5 TPY is consistent with this approach.

Best Available Control Technology (BACT)

For any new or modified emission unit, a facility is required to demonstrate that the unit to be constructed, reconstructed or modified will receive Best Available Control Technology (BACT). BACT is defined as an emission limitation based on the maximum degree of reduction for each pollutant emitted through the application of production processes or available methods, systems, and techniques taking into account energy, environmental, and economic impacts and other costs.

16 Pine Meadows Lane, North Yarmouth, Maine 04097
Phone/fax (207) 846-9897 ♦ meeinc@maine.rr.com

NOx emissions from internal combustion engines are primarily reduced by optimizing combustion to limit NOx formation or by using add-on control equipment. The following is a brief description of the standard control systems considered for NOx.

Selective Catalytic Reduction (SCR) is an add-on control designed to treat the exhaust stream by injecting urea ($CO(NH_2)_2$) or ammonia (NH_3) in the flue gas. The reagent reacts with the NOx in the presence of a catalyst to form water and nitrogen. Based on a 2008 report by the California Air Resources Board, potential NOx reduction in diesel engines can range from 50% to 90%. The cost for an SCR unit for this engine is estimated to be a minimum of $180,000. There would also be additional transportation, installation, and testing cost. The annual operational costs would also include chemical usage at a total cost of about $18,000 per year. Load fluctuations are expected in this process, which can cause variations in exhaust temperature and NOx concentration and create problems with the effectiveness of the SCR system. In addition to the high cost of installation and operation, there are also environmental and safety risks that are incurred from the use of ammonia or urea. Based on these costs and considering the revised fuel use limit, the expected cost of SCR would be in the order of $5,500 per ton of NOx reduction, which is considered prohibitive for a source of this type.

Control Costs	SCR
Capital	$180,000.00
Ammonia	$18,000.00
Annual Cost*	$54,000.00
Percent Reduction	50%
Reduction (TPY)	9.76
Cost/ton	$5,532.08

*Annualized over 5 years

Selective Non-Catalytic Reduction (SNCR) is also used as an add-on NOx control, and involves the injection of ammonia or urea into the exhaust stream without the use of a catalyst. The reduction reaction typically requires ammonia injection at a point where the temperature is between 1,600-2,100 degrees Fahrenheit (°F). However, the exhaust temperature at BI&MR is expected to be 750°F; therefore, SNCR is not suitable for this application. SNCR systems using exhaust re-burn technologies exist, but are typically more expensive than SCR, and therefore are considered impractical.

Natural Gas Firing could also be considered an option for reducing NOx emissions. However, due to the operation of large pieces of mobile equipment in the confines of the scrap metal yard, BI&MR is concerned about the potential safety risks of using gas at its facility. Therefore, the use of gaseous fuel was considered impractical for this application.

Ignition Timing Retard (ITR) is an effective and reliable method of NOx control for diesel engines. This approach delays the fuel injector timing to minimize peak combustion temperature. ITR reduces NOx formation, and this is balanced against the potential for increasing CO and particulate matter (PM) emissions. Therefore, BI&MR proposes to use a type of fuel injector and turbocharger aftercooler which will help offset these limitations and improve the efficacy of ITR.

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The proposed unit has been fitted with GM Ecotip fuel injectors, which are designed to improve the fuel input pattern and improve fuel efficiency. These injectors reduce visible emissions, PM, carbon monoxide (CO), and volatile organic compound (VOC) emissions significantly, compared to standard injectors. This improves the ability for retarding the timing in order to reduce NOx emissions.

Turbocharged engines use a turbine in the exhaust stream to power a separate compressor turbine in the air intake manifold. The engine that BI&MR proposes to use will be equipped with a GM/Electro-Motive four-pass aftercooler, which helps to decrease NOx formation by decreasing the combustion air temperature. The manufacturer has conducted testing showing that the four-pass aftercooler can reduce NOx emissions by 15% at full load, compared to the standard two-pass model.

Proper Operation and Good Combustion And Maintenance Practices help ensure proper operation of the diesel drive unit, thereby minimizing emissions. This includes controlling the shredder operations using integrated hardware and software to reduce energy usage, which will in turn reduce emissions from the diesel drive unit. The plant will be equipped with an automatic system for controlling operations such as shredder feed rate, feed roll pressure, engine throttle position, etc. By monitoring relevant variables, these controls maximize drive motor performance and control the feed rate, resulting in increased production efficiency, improved product, increased nonferrous recovery, and reduced power cost per ton. This reduced energy consumption also means that the engine fuel use will be minimized and that the loading is more consistent, reducing the potential for surging and/or lugging, thereby minimizing emissions from the drive unit.

Another important development in this generation of shredder is an improved power coupling between the drive unit and the shredder. BI&MR's proposed shredder uses a simple reduction gear to ensure that the shredder and diesel drive unit both operate at their optimum RPM range to maximize usable torque and minimize emissions. The shredder mill is expected to operate at approximately 600 RPMs, while the engine operates at approximately 850-900 RPMs.

Derating reduces cylinder pressures and temperatures thereby lowering NOx formation rates.The high power rating of the engine will help to prevent excessive engine lugging under load, which will help control visible emissions. Earlier shredders were often coupled with smaller engines, which could be bogged down during loading, potentially leading to concerns about visible emission. This proposed unit is expected to have sufficient power to operate more steadily, especially when used in conjunction with the automated controls described previously. This also means that for most of the time, the unit will be running at well below its maximum power rating. This will in effect de-rate the engine, which will significantly reduce NOx emissions.

Revised emissions tables showing the proposed controlled emissions are included with this letter. The proposed emissions are based on the United States Environmental Protection Agency (EPA) AP-42, "*Compilation of Air Pollutant Emission Factors, Volume I*", Table 3.4-1 for Large Stationary Diesels. The controlled NOx emissions values were based on the use of ignition timing retard. The combination of this control as well as the use of an annual fuel limit will control emissions to a level that additional add-on controls would not be economically feasible considering the type of facility and expected mode of operation.

The proposed AP-42 emission factor is 1.9 lb/MMBtu, which equates to 6.6 grams per horsepower-hour (g/hp-hr). As stated in the application, this engine hasn't been "reconstructed or modified," and therefore is not subject to 40 CFR 60 Subpart IIII. However, as a point of comparison, the proposed limit is less than the NSPS standard for similar size engines. The NSPS standard for pre 2007 engines with a displacement >10 liters per cylinder, is to meet the "Tier 1" standard in 40 CFR 94.8(a)(1). The Tier 1 standard calculated for this type of engine would be 8.6 g/hp-hr (based on its displacement of 10.6 liters per cylinder and speed rating of 900 RPM). As another point of comparison, the proposed emissions of 6.6 g-hp-hr are lower than the NSPS limit of 6.9 g/hp-hr for engines with a displacement of less than 10 liters per cylinder in Table 1 of 40 CFR 60 Subpart IIII.

In fact, the proposed emission rate in conjunction with the revised fuel limit would actually reduce emissions below what would have been obtained by installing a Tier 4 diesel engine with the originally proposed fuel limit.

Considering BI&MR's proposed configuration, and assuming a fuel use limit of 150,000 gallons per year, NOx emissions would be a maximum of 19.5 tons per year (TPY). Other units in Maine of similar size and configuration have had annual NOx limits imposed as the BACT determination, as follows:

Similar Facilities	**Licensed NOx Limit**
Merrill Blueberry	20 TPY
WPS New England Generation	20 TPY

Based on the review of other similar units and the proposed configuration, BI&MR proposes to meet the requirements of BACT by limiting NOx emissions to 19.5 TPY. Emissions are based on an annual fuel limit of 150,000 gallons per year and the use of use of "Ecotip Injectors," a "Four Pass Intercooler," and ignition timing retard.

If you have any questions or if additional information is needed, please call Alan Morrison at (207) 846-9897.

Sincerely,

Alan Morrison

Alan Morrison
Vice President

Enc: Revised Emissions Tables

cc: Mr. Robert Brenna, President, Berwick Iron and Metal Recycling, Inc.
Jay Stephens, Civil Consultants

TABLE 1
Controlled Hourly and Annual Emissions from Diesel Drive Unit
(Revised)

Berwick Iron and Metal Recycling, Inc.
Berwick, Maine

POTENTIAL HOURLY EMISSIONS WITH TIMING RETARDED

Unit	Maximum Fuel Input (gal/hr)	SO_2 Emissions	NOx Emissions	CO Emissions	PM_{10} Emissions	VOC Emissions
Diesel Engine Emission Factors[1,2]		0.05 lbs/MMBtu	1.9 lbs/MMBtu	0.85 lbs/MMBtu	0.12 lbs/MMBtu	0.09 lbs/MMBtu
Typical Expected	75	0.51 lbs/hr	19.52 lbs/hr	8.73 lbs/hr	1.23 lbs/hr	0.92 lbs/hr
Maximum Rated	200	1.37 lbs/hr	52.06 lbs/hr	23.29 lbs/hr	3.29 lbs/hr	2.47 lbs/hr

ANNUAL EMISSIONS WITH LIMITED FUEL USE AND TIMING RETARDED

Unit	Maximum Expected Fuel Input (gal/hr)	Potential Hours of Operation	Potential Fuel Usage (gal)	Potential SO_2 Emissions	Potential NOx Emissions	Potential CO Emissions	Potential PM_{10} Emissions	Potential VOC Emissions
Diesel Engine Emission Factors[1,2]				0.05 lbs/MMBtu	1.9 lbs/MMBtu	0.85 lbs/MMBtu	0.12 lbs/MMBtu	0.09 lbs/MMBtu
Diesel Engine	75	2000	150,000	1,027.5 lbs	39,045.0 lbs	17,467.5 lbs	2,466.0 lbs	1,849.5 lbs
Total Emissions in lbs				1,027.5 lbs	39,045.0 lbs	17,467.5 lbs	2,466.0 lbs	1,849.5 lbs
Total Emissions in tons				0.51 tons	19.52 tons	8.73 tons	1.23 tons	0.92 tons

1. SO2 emission factor based on mass balance calculation assuming a fuel sulfur content of 0.05%.
2. NOx, CO, PM10, and VOC emission factors based on EPA AP-42, *Compilation of Air Pollutant Emission Factors, Volume I*", Table 3.4-1 for Large Stationary Diesels
3. Potential emissions based on proposed license limit of 2000 hours of operation per year, and "typical" expected fuel use rate.
4. Diesel Heating Value assumed to be 0.137 MMBtu/gal.

EXHIBIT E

264

Merrill Blueberry Farms, Inc.
Hancock County
Ellsworth, Maine
A-836-71-D-R (SM)

Departmental
Findings of Fact and Order
Air Emission License

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Merrill Blueberry Farms, Inc. (Merrill) of Ellsworth, Maine has applied to renew their Air Emission License, permitting the operation of emission sources associated with their blueberry freezing and processing facility.

B. Emission Equipment

Merrill is authorized to operate the following air emission units:

Electrical Generation Equipment

Equipment	Power Output (kW)	Engine Firing Rate (gal/hr)	Maximum Capacity (MMBtu/hr)	Stack #
Generator #1	545	42.8	5.9	1
Generator #2	455	25.7	3.52	2
Generator #3	725	52.5	7.17	3
Generator #4	725	52.5	7.17	4

C. Application Classification

The application for Merrill does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be a renewal of current licensed emissions units only. With the fuel limit the generators, the facility is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment

(BPT), as defined in *Definitions Regulation,* 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Facility Control Equipment Requirements

Merrill is limited to 20 tons per year of NO_x on a facility wide basis. This limit may be achieved using a self imposed fuel limit, low emission diesel engine replacement, selective catalytic reduction (SCR), or a combination of all of these methods. Actual NOx emissions are determined on a monthly basis by multiplying each generator's actual fuel consumption during a given month (expressed in gallons) by a NO_x emission factor (expressed in pounds of NO_x per gallon of fuel burned) derived from the most recent emissions test performed on the generator. The NO_x emission factor which will be used for Generators #1, #2, #3 and #4 prior to the completion of a new emission test is as follows:

Generator #1	0.065 # NO_x /gallon of fuel burned
Generator #2	0.035 # NO_x / gallon of fuel burned
Generator #3 & #4	0.3257 # NO_x / gallon of fuel burned

C. Diesel Generator #1

A summary of the BPT analysis for each of the pollutants is discussed below:

1. Emission limits for PM and PM_{10} are regulated by 06-096 CMR 103. However the manufacturer "not to exceed" emission data is more stringent and 0.10 lb /MMBtu is considered BPT.
2. 06-096 CMP 106 regulates fuel sulfur content, however the use of 0.05% sulfur by weight fuel is more stringent and shall be used.
3. NO_x, CO and VOC emission rates are based on "not to exceed" emission data provided by the engine manufacturer of 2.38 lb NO_x/MMBtu, 0.30 lb CO/MMBtu and 0.005 lb VOC/MMBtu.
4. The use of an automatic switchgear system to operate the facility in the most fuel-efficient mode possible.
5. EPA Tier 2 Certified diesel engine.

6. Opacity from the diesel engine shall not exceed 20% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

D. Diesel Generator #2

A summary of the BPT analysis for each of the pollutants is discussed below:

1. Emission limits for PM and PM_{10} are regulated by 06-096 CMR 103.
2. 06-096 CMR 106 regulates fuel sulfur content, however the use of 0.05% sulfur by weight fuel is more stringent and shall be used.
3. NO_x emission rates are based on "not to exceed" emission data provided by the engine manufacturer.
4. CO and VOC emission rates were based upon AP-42 data dated 10/96 for diesel engines less than 600 hp.
5. The use of an automatic switchgear system to operate the facility in the most fuel-efficient mode possible.
6. The use of an electronic ignition engine to minimize emissions.
7. Opacity from the diesel engine shall not exceed 20% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

E. Diesel Generator #3 & #4

A summary of the BPT analysis for each of the pollutants is discussed below:

1. Emission limits for PM and PM_{10} are regulated by 06-096 CMR 103.
2. 06-096 CMR 106 regulates fuel sulfur content, however the use of 0.05% sulfur by weight fuel is more stringent and shall be used.
3. NO_x emission rates are based on "not to exceed" emission data provided by the engine manufacturer.
4. CO and VOC emission rates were based upon AP-42 data dated 10/96 for diesel engines larger than 600 hp.
5. The use of an automatic switchgear system to operate the facility in the most fuel-efficient mode possible.
6. The use of an electronic ignition engine to minimize emissions.
7. Opacity from each diesel engine shall not exceed 20% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

F. Annual Emissions

The annual emissions from Merrill were based on Diesel #2 triggering the 20 TPY annual NO_x limit with no other engines running. This scenario yielded the highest amount of other criteria pollutant being emitted.

Merrill has the following annual emissions, based on a 12 month rolling total and based on operating records:

Total Annual Emissions for the Facility
(used to calculate the annual license fee)

Pollutant	Tons/yr
PM	1.3
PM_{10}	1.3
SO_2	0.5
NO_X	20.0
CO	9.9
VOC	3.7

III. AMBIENT AIR QUALITY ANALYSIS

According to the 06-096 CMR 115, the level of air quality analyses required for a minor new source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-836-71-D-R, subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions. [06-096 CMR 115]

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S.A. § 353. [06-096 CMR 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
2. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) Diesel Generator Emission Limits

A. Emissions from Diesel Generator #1 shall not exceed the following [06-096 CMR 115, BPT]:

Pollutant	lb/MMBtu	lb/hr
PM	0.10	0.59
PM_{10}	n/a	0.59
SO_2	n/a	0.30
NO_x	n/a	14.04
CO	n/a	1.77
VOC	n/a	0.03

B. Emissions from Diesel Generator #2 shall not exceed the following [06-096 CMR 115, BPT]:

Pollutant	lb/MMBtu	lb/hr
PM	0.12	0.42
PM_{10}	n/a	0.42
SO_2	n/a	0.18
NO_x	n/a	6.72
CO	n/a	3.34
VOC	n/a	1.23

C. Emissions from Generator #3 & #4 each shall not exceed the following [06-096 CMR 115, BPT]:

Pollutant	lb/MMBtu	lb/hr
PM	0.12	0.86
PM_{10}	n/a	0.86
SO_2	n/a	0.37
NO_x	n/a	16.92
CO	n/a	6.09
VOC	n/a	0.72

(17) Only diesel fuel having a maximum sulfur content of 0.05% shall be fired in Generators #1, #2, #3 & #4 as well as any rental generating units brought on site. Compliance shall be based on fuel receipts from the supplier showing the percent sulfur of the fuel. [06-096 CMR 115, BPT]

(18) Visible emissions from each diesel unit, including rental units, shall not exceed 20% opacity on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 101]

(19) Diesel Generator #2, #3 & #4 each shall utilize electronic ignition [06-096 CMR 115, BPT].

(20) Diesel Generator #1, #2, #3 and #4 shall use an automatic switchgear system to operate the facility in the most fuel-efficient mode possible. [06-096 CMR 115, BPT]

(21) The combined actual NO_x emissions from the facility's electrical generation equipment shall not exceed 20 tons on a 12-month rolling total basis. [06-096 CMR 115, BPT]:

(22) Merrill is authorized to operate Generators #1, #2, #3, and #4, as well as rental generators that may be necessary on a temporary basis to meet the facility's electric power needs. NO_x emissions from any rental generators shall be included in the determination of compliance with the 20 TPY limit. [06-096 CMR 115, BPT]

(23) A license amendment shall not be required for Merrill to retrofit a generator with NO_x emission control equipment if such equipment is necessary to comply with the 20 TPY limit. [06-096 CMR 115, BPT]

(24) Actual NO_x emissions from Generators #1, #2, #3 and #4 shall be determined on a monthly basis by multiplying each generator's actual fuel consumption during a given month (expressed in gallons) by a NO_x emission factor (expressed in pounds of NO_x per gallon of fuel burned) derived from the most recent emissions test performed on the generator. The NO_x emission factor to be used for Generators #1, #2, #3 and #4 prior to the completion of a new emission test is as follows [06-096 CMR 115, BPT]:

Generator #1	0.065 # NO_x /gallon of fuel burned
Generator #2	0.035 # NO_x / gallon of fuel burned
Generator #3 & #4	0.3257 # NO_x / gallon of fuel burned

(25) Merrill shall maintain and operate a fuel flow meter on Generators #1, #2, #3 and #4. Each meter shall be equipped with a totalizer capable of displaying the total number of gallons of fuel burned. The totalizer reading from each generator shall be recorded at the beginning of each calendar month, and the previous month's reading shall be subtracted from the current reading to determine the actual fuel consumption during the prior calendar month. [06-096 CMR 115, BPT]

(26) For purposes of determining fuel consumption in a rental generator, if the rental generator is supplied fuel from its own dedicated storage tank, Merrill shall use records of fuel deliveries along with tank inventory at the beginning and end of its operating period. If the fuel supply for the rental generator is obtained from a storage tank that serves one or more permanent generators, the fuel consumption in the rental generator shall be determined by calculating the combined usage in all generators using fuel deliveries and tank inventory levels during the rental generator's period of operation, and then subtracting out the actual fuel consumption in the permanent generators as determined by totalizer readings. [06-096 CMR 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2007.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 22, 2007
Date of application acceptance: June 29, 2007

Date filed with the Board of Environmental Protection _____

This order prepared by Mark E. Roberts, Bureau of Air Quality